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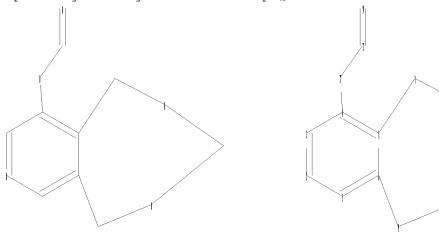
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chain nodes :
12 13 14
ring nodes :
1 2 3 4 5 6 7 8 9 10 11
chain bonds :
4-12 12-13 13-14
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-11 9-10 10-11
exact/norm bonds :

4-12 12-13 13-14 exact bonds :

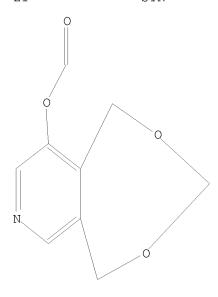
5-7 6-9 7-8 8-11 9-10 10-11 normalized bonds:
1-2 1-6 2-3 3-4 4-5 5-6 isolated ring systems: containing 1:

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:CLASS 13:CLASS 14:CLASS

L1 STRUCTURE UPLOADED

=> d l1 L1 HAS NO ANSWERS L1 STR



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SAMPLE SEARCH INITIATED 13:01:23 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 7 TO ITERATE

100.0% PROCESSED 7 ITERATIONS 4 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 7 TO 298

PROJECTED ANSWERS: 4 TO 200

L2 4 SEA SSS SAM L1

=> s 11 full

FULL SEARCH INITIATED 13:01:27 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 89 TO ITERATE

100.0% PROCESSED 89 ITERATIONS 27 ANSWERS

SEARCH TIME: 00.00.01

27 SEA SSS FUL L1 L3

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=> s 13 full 20 L3 L4

=> s 13/prep full 20 L3

L5

4552880 PREP/RL 17 L3/PREP

(L3 (L) PREP/RL)

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L5 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:165553 CAPLUS

DOCUMENT NUMBER: 146:206335

TITLE: Preparation of pyrimidinecarboxamides as CXCR2

receptor antagonists for the treatment of inflammation INVENTOR(S):

Baughman, Theodore A.; Boyce, Jim P.; Darwish, Ihab S.; Howbert, J. Jeffry; Ihle, Nathan C.; Jackson,

Randy W.; Jeffrey, Scott C.; Maeda, Dean; Yager, Kraig

Μ.

PATENT ASSIGNEE(S): Ucb SA, UK
SOURCE: U.S., 32pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 7176310	В1	20070213	US 2003-407870	20030404
PRIORITY APPLN. INFO.:			US 2002-371265P P	20020409
OTHER COURCE (C).	MADDAT	1/6.206225		

OTHER SOURCE(S): MARPAT 146:206335

GΙ

$$R^2$$
 R^4
 R^3
 R^4
 R^4
 R^3
 R^4
 R^4

AB Title compds. I [wherein R1 = aralkyl or aryl; R2 = H or NH2; R3 = aryloxy, arylsulfinyl, amino, etc.; R4 = H, halo or alkyl, with limitations] and their stereoisomers, pharmaceutically acceptable salts or solvates thereof, which are useful as chemokine CXCR2 receptor antagonist and anti-inflammatory agents (no data), were prepared Thus, compound II was obtained in 30% yield by condensation of the corresponding 2-methylsulfinylpyrimidine (preparation given) with benzyl glycolate.

IT 923292-04-0P

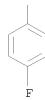
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrimidinecarboxamide derivs. as CXCR2 receptor antagonists for treatment of inflammation)

RN 923292-04-0 CAPLUS

CN Acetic acid, 2-[[5-[[(4-fluorophenyl)amino]carbonyl]-2-pyrimidinyl]oxy]-, 1,5-dihydro-8-methyl-3-(1-methylethyl)[1,3]dioxepino[5,6-c]pyridin-9-yl ester (CA INDEX NAME)

PAGE 2-A



REFERENCE COUNT:

79 THERE ARE 79 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:472161 CAPLUS

DOCUMENT NUMBER: 143:7535

TITLE: Manufacture of vitamin B6 and related

9-acyloxy-1,5-dihydro-8-methylpyrido[3,4-

e][1,3]dioxepins

INVENTOR(S): Fischesser, Jocelyn; Fritsch, Helmut; Gum, Andrew

George; Karge, Reinhard; Keuper, Ralf

PATENT ASSIGNEE(S): DSM IP Assets B. V., Neth. SOURCE: PCT Int. Appl., 23 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

F	PATENT NO.			KIND DATE			APPLICATION NO.					DATE					
_ ⊽	WO 2005049618			A1 20050602		WO 2004-EP12655				20041109							
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	${ m MZ}$,	NA,	ΝI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NΑ,	SD,	SL,	SZ,	TZ,	UG,	ZM_{\bullet}	ZW,	ΑM,
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FΙ,	FR,	GB,	GR,	ΗU,	ΙE,	IS,	ΙΤ,	LU,	MC,	NL,	PL,	PT,	RO,
		SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,
		ΝE,	SN,	TD,	ΤG												
E	EP 1685	133			A1		2006	0802		EP 2	004-	8187	64		2	0041	109
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	FΙ,	RO,	CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	IS			
_	CN 1882						2006									0041	109
	JP 2007															0041	109
Ţ	JS 2007	0072	254		A1		2007	0329		US 2	006-	5798	36		2	0060	608
PRIORI	ITY APP	LN.	INFO	.:						DE 2	003-	1035	3999		A 2	0031	119
										WO 2					W 2	0041	109
OTHER GI	SOURCE	(S):			CAS:	REAC	T 14	3 : 75	35 ;	MARP.	AT 1	43:7	535				

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A process for manufacturing a 3-un-, 3-mono- or 3,3-disubstituted 9-acyloxy-1,5-dihydro-8-methylpyrido[3,4-e] [1,3]dioxepin I [R2, R3 = H, C1-4-alkyl C2-4-alkenyl; R4 = C1-4-alkyl, C1-4-haloalkyl, Ph-(C1-4-alkyl), Ph; CR2R3 = C4-6-cycloalkylidene] and optionally for manufacturing pyridoxine involves performing an addition reaction between a 4-methyl-5-alkoxy-oxazole II [R1 = C1-4-alkyl] and a 2-un-, 2-mono- or 2,2-disubstituted 4,7-dihydro-1,3-dioxepin III in the substantial absence of a solvent and a catalyst to give a product mixture consisting essentially of the appropriate Diels-Alder adduct IV in a major proportion and the appropriate 3-un-, 3-mono- or 3,3-disubstituted 1,5-dihydro-8-methylpyrido[3,4-e][1,3]dioxepin-9-ol V in a minor proportion, removal of a substantial proportion of the unreacted oxazole and dioxepin starting materials from the product mixture by distillation under reduced pressure, addition of a substantially anhydrous organic acid to said product mixture and rearrangement

substantially anhydrous organic acid with removal of the generated alkanol by distillation under reduced pressure, and acylation of the resultingly enriched quantity of V with an added carboxylic acid anhydride, (R4CO)2O to produce the desired I, and optionally converting this so-manufactured acylation product I to pyridoxine by acid hydrolysis for achieving deprotection and deacylation. Pyridoxine [VI] is a well known form of vitamin B6 with well established utility.

IT 92671-67-5P, 9-Acetoxy-1,5-Dihydro-3-isopropyl-8-methylpyrido[3,4-e][1,3]dioxepin

RL: SPN (Synthetic preparation); PREP (Preparation) (manufacture of vitamin B6 and related 9-acyloxy-1,5-dihydro-8-methylpyrido[3,4-e][1,3]dioxepins)

RN 92671-67-5 CAPLUS

CN [1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-8-methyl-3-(1-methylethyl)-, acetate (ester) (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN 1.5

2002:981764 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 138:287060

Crystal structure of seven-membered acetals with furan TITLE:

and pyridine planar fragments

AUTHOR(S): Fedorenko, V. Yu.; Lodochnikova, O. A.; Petukhov, A.

S.; Kataeva, O. N.; Litvinov, I. A.; Shtyrlin, Yu. G.;

Klimovitskii, E. N.

A.M. Butlerov Chemical Research Institute, Kazan State CORPORATE SOURCE:

University, Kazan, 420008, Russia

SOURCE: Journal of Molecular Structure (2003), 644(1-3), 89-96

CODEN: JMOSB4; ISSN: 0022-2860

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

X-ray structure investigation of fused seven-membered acetals based on vitamin B6 and 3,4-bis(hydroximethyl)furan have been performed. Mols. adopt chair conformations with equatorial position of substituents at acetal carbons; the geometry of acetal cycles resembles that of related seven-membered phthalylacetals. Stereochem. of the tetracyclic adduct of furan-containing acetal with maleic anhydride was also investigated. The product exhibits endo-exo configuration with appreciably distorted seven-membered chair-like conformation.

ΙT 451461-88-4P 505074-22-6P

RL: PRP (Properties); SPN (Synthetic preparation); PREP

(Preparation)

(preparation and crystallog. of)

RN 451461-88-4 CAPLUS

[1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-3,8-dimethyl-, benzoate CN (ester) (9CI) (CA INDEX NAME)

RN 505074-22-6 CAPLUS

[1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-3,8-dimethyl-, CN 4-nitrobenzoate (ester) (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:103940 CAPLUS

DOCUMENT NUMBER: 136:334219

TITLE: Studies on the synthesis, relaxivity and

liver-targeting of DTPA-pyridoxol ester gadolinium

complexes

AUTHOR(S): Ding, Xiong-jun; Zhuo, Ren-xi; Fu, Gong-cheng

CORPORATE SOURCE: Key Lab. of Biomedical Polymer Materials, Ministry of

Education; Department of Chemistry, Wuhan University,

Wuhan, 43--72, Peop. Rep. China

SOURCE: Gaodeng Xuexiao Huaxue Xuebao (2002), 23(1), 49-52

CODEN: KTHPDM; ISSN: 0251-0790

PUBLISHER: Gaodeng Jiaoyu Chubanshe

DOCUMENT TYPE: Journal LANGUAGE: Chinese

OTHER SOURCE(S): CASREACT 136:334219

AB Several new DTPA-pyridoxol ester ligands ROOCCH2N(CH2COOH)CH2CH2N(CH2COOH)CH2CH2N(CH2COOH)CH2COOH)CH2CH2N(CH2COOH)CH2COOR were synthesized by reacting diethylenetriaminepentaacetic anhydride (DTPAA) with pyridoxol (R) derivs. Their gadolinium complexes were also prepared Their T1 relaxivities in water were measured. The 99Tc-labeled combination radioactivity experiment with liver cells and kidney cells of mice showed that two ligands possessed an excellent liver-targeting property. The results of animal MR imaging experiment further confirmed that the signals in liver were obviously strengthened after injection of their complexes.

IT 412939-75-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(reactant; preparation, T1 relaxivity, and liver-targeting properties of gadolinium DTPA-pyridoxol ester complexes in 99Tc-labeled combination radioactivity expts.)

RN 412939-75-4 CAPLUS

CN Glycine, N,N-bis[2-[(carboxymethyl)[2-[(1,5-dihydro-3,3,8-trimethyl[1,3]dioxepino[5,6-c]pyridin-9-yl)oxy]-2-oxoethyl]amino]ethyl]-(9CI) (CA INDEX NAME)

L5 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:106715 CAPLUS

DOCUMENT NUMBER: 126:186065

TITLE: Chemistry of 1,3-dioxepins. XI. Bis(4,7-dihydro-1,3-

dioxepin) approach to pyridoxine intermediates

1,5-dihydro-8-methyl-3H-[1,3]dioxepino[5,6-c]pyridin-9-

ols

AUTHOR(S): Dumic, Miljenko; Vinkovic, Mladen; Jadrijevic-Mladar

Takac, Milena; Butula, Ivan

CORPORATE SOURCE: PLIVA-Research Institute, Zagreb, HR-10000, Croatia

SOURCE: Croatica Chemica Acta (1996), 69(4), 1561-1576

CODEN: CCACAA; ISSN: 0011-1643

PUBLISHER: Croatian Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB The novel pyridoxine intermediates, bis-dioxepino[5,6-c]pyridin-9-ols have been synthesized starting from bis-(4,7-dihydro-1,3-dioxepins). Their constitution and configuration has been confirmed by single-crystal X-ray diffractions.

IT 187467-71-6P 187467-73-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 187467-71-6 CAPLUS

CN [1,3]Dioxepino[5,6-c]pyridin-9-ol, 3,3'-(1,3-propanediyl)bis[1,5-dihydro-8-methyl-, diacetate (ester) (9CI) (CA INDEX NAME)

RN 187467-73-8 CAPLUS

CN [1,3]Dioxepino[5,6-c]pyridin-9-ol, 3,3'-(1,3-propanediyl)bis[1,5-dihydro-8-methyl-, dibenzoate (ester) (9CI) (CA INDEX NAME)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:455657 CAPLUS

DOCUMENT NUMBER: 97:55657

ORIGINAL REFERENCE NO.: 97:9369a,9372a

TITLE: Heterogeneous condensation of lauroyl chloride with some pyridine derivatives in the presence of alkali

AUTHOR(S): Koruncev, Dimitar; Coric, Miljenko; Rota, Hrvatinka;

Miric, Ljubomir
CORPORATE SOURCE: Zagreb, Yugoslavia

SOURCE: Farmaceutski Glasnik (1982), 38(3), 73-5

CODEN: FAGLAI; ISSN: 0014-8202

DOCUMENT TYPE: Journal

LANGUAGE: Serbo-Croatian

Ι

GΙ

AB Acylation of pyridoxine derivs. I (R = H; R1 = R2 = OAc, Br, NHC6H4CF3-3; R1 = OMe, R2 = OAc; R1R2 = O2CHCHMe2, O2CMe2) with Me(CH2)10COC1 in C6H6, PhMe or petroleum ether containing 1 equivalent solid or aqueous alkali at room temperature

gave .apprx.80% I [R = Me(CH2)10CO; same R1, R2].

IT 82470-52-8P 82483-56-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 82470-52-8 CAPLUS

CN Dodecanoic acid, 1,5-dihydro-3,3,8-trimethyl[1,3]dioxepino[5,6-c]pyridin-9-yl ester (CA INDEX NAME)

RN 82483-56-5 CAPLUS

CN Dodecanoic acid, 1,5-dihydro-8-methyl-3-(1-methylethyl)[1,3]dioxepino[5,6-c]pyridin-9-yl ester (CA INDEX NAME)

L5 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:79353 CAPLUS

DOCUMENT NUMBER: 96:79353

ORIGINAL REFERENCE NO.: 96:12893a,12896a

TITLE: Stability, bactericidal activity, vitamin B6 activity

and gastrointestinal absorption of benzoic acid esters

of pyridoxine

AUTHOR(S): Mizuno, Nobuyasu; Fukumoto-Hato, Miyako;

Matsumoto-Yoshino, Miyuki; Morita, Emiko

CORPORATE SOURCE: Fac. Pharm. Sci., Mukogawa Women's Univ., Hyogo, 663,

Japan

SOURCE: Journal of Nutritional Science and Vitaminology

(1981), 27(3), 165-75

CODEN: JNSVA5; ISSN: 0301-4800

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

Me OH
$$R=Bz$$
, $R^1=H$ CH_2OR^1 II, $R=H$, $R^1=Bz$

AΒ α 4-O-Benzoyl pyridoxine (PN-4'MB)(I) was synthesized; PN-4'MB and α 5-O-benzoyl pyridoxine (PN-5'MB)(II) obeyed apparent first-order kinetics when hydrolyzed in 10% aqueous acetone solution at pH 1-4. At pH 1-7, PN-4'MB was hydrolyzed 10 times faster than PN-5'MB. At pH 7-12, an interconversion between the 2 derivs. was observed Both were bactericidal against Escherichia coli and Bacillus subtilis and prevented severe convulsions induced in mice by 4'-methoxypyridoxine, a potent antagonist of vitamin B6. PN-4'MB was hydrolyzed by rat liver homogenates more easily than PN-5'MB. The metabolite of both in man was identified as 4'-pyridoxic acid, a principal metabolite of pyridoxine, by high-performance liquid chromatog. The amount of urinary excretion of 4'-pyridoxic acid in 10 h after oral administration of PN-4'MB or PN-5'MB was as large as that after pyridoxine. Thus, I and II, when used as an ointment or cosmetic preservative, appear to be hydrolyzed by skin enzymes and exhibit bactericidal and vitamin B6 activities.

IT 14210-76-5P

RN 14210-76-5 CAPLUS

CN [1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-3,3,8-trimethyl-, benzoate (ester) (8CI, 9CI) (CA INDEX NAME)

L5 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976:89958 CAPLUS

DOCUMENT NUMBER: 84:89958

ORIGINAL REFERENCE NO.: 84:14673a,14676a

TITLE: A novel acetyl migration reaction from oxygen to

oxygen in a pyridoxine derivative promoted by metal

ions

AUTHOR(S): Iwata, Masaaki; Kuzuhara, Hiroyoshi; Emoto, Sakae

CORPORATE SOURCE: Inst. Phys. Chem. Res., Wako, Japan SOURCE: Chemistry Letters (1976), (1), 17-18

CODEN: CMLTAG; ISSN: 0366-7022

DOCUMENT TYPE: Journal LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB 2-Acetoxy-3-O-acetyl-4,5-O-isopropylidenepyridoxine (I, R = AcO) was converted to 2'-acetoxy-4'-acetylpyridoxine (III) in Me2CO in the presence of metal ions such as Zn, Cu, Fe, and Al. Of these catalysts Fe was the most effective. However, I (R = H) and its N-oxide did not give migration products with these catalysts.

IT 14213-49-1P 58620-81-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 14213-49-1 CAPLUS

CN [1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-3,3,8-trimethyl-, acetate (ester) (8CI, 9CI) (CA INDEX NAME)

RN 58620-81-8 CAPLUS

CN [1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-3,3,8-trimethyl-, acetate (ester), 7-oxide (9CI) (CA INDEX NAME)

L5 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976:22040 CAPLUS

DOCUMENT NUMBER: 84:22040

ORIGINAL REFERENCE NO.: 84:3615a,3618a

TITLE: Pyridoxine derivatives. XIII. Hydrolysis of

pyridoxine monooctanoates

AUTHOR(S): Mizuno, Nobuyasu; Fujimoto, Michiyo; Kamada, Akira CORPORATE SOURCE: Fac. Pharm. Sci., Mukogawa Women's Univ., Nishinomiya,

Japan

SOURCE: Bitamin (1975), 49(9-10), 395-401 CODEN: BTMNA7; ISSN: 0006-386X

DOCUMENT TYPE: Journal LANGUAGE: Japanese

GI For diagram(s), see printed CA Issue.

AB Pyridoxine 4-monooctanoate (I) [57547-09-8] was more soluble in organic solvents and water than pyridoxine 5-monooctanoate (II) [18426-21-6]. In buffer solns. of a constant pH between 2 and 3 hydrolysis of monooctanoates obeyed an apparent first-order kinetics. The substance passing through the rat intestine was pyridoxine [65-23-6] alone.

IT 57547-10-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 57547-10-1 CAPLUS

CN Octanoic acid, 1,5-dihydro-3,3,8-trimethyl[1,3]dioxepino[5,6-c]pyridin-9-yl ester (CA INDEX NAME)

L5 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1973:511555 CAPLUS

DOCUMENT NUMBER: 79:111555

ORIGINAL REFERENCE NO.: 79:18067a,18070a

TITLE: Chemistry and biology of vitamin B6. 31. Synthesis

and physicochemical and biological properties of

6-halogen-substituted vitamin B6 analogs

AUTHOR(S): Korytnyk, W.; Srivastava, S. C.

CORPORATE SOURCE: Dep. Exp. Ther., Roswell Park Mem. Inst., Buffalo, NY,

USA

SOURCE: Journal of Medicinal Chemistry (1973), 16(6), 638-42

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal LANGUAGE: English

The presence of a 6-halogen atom in vitamin B6 analogs radically changed their phys.-chemical properties, especially pKa values, resulting in a loss of zwitterionic character and assumption of a hydrophobic character. All 6-fluoro analogs inhibited growth in vitro of mouse mammary adenocarcinoma and sarcoma 180 cells, the most potent compound being 6-fluoropyridoxal oxime (I) [42242-38-6], but were ineffective in the presence of 10-5 M pyridoxal [66-72-8]. I and 6-chloropyridoxol [15741-67-0] were potent convulsants in mice, causing 100% mortality at 50 and 100 mg/kg, resp. was prepared from 6-aminopyridoxol [42242-40-0] by a modified Schiemann reaction yielding 6-fluoropyridoxol [42242-41-1], which was selectively oxidized with MnO2 to 6-fluoropyridoxal [42242-42-2] and treated with NH2OH.HCl. 6-Chloropyridoxol, the intermediate in preparation of chlorinated derivs., was prepared by chlorination of $\alpha 4, \alpha 5\text{-O-}$ isopropylidenepyridoxol [948-00-5] with Me3COCl and acid hydrolysis. 6-Fluoropyridoxamine phosphate [42242-44-4] was a potent inhibitor in vitro of pyridoxine phosphate oxidase [9055-72-5], the enzyme catalyzing formation of pyridoxal phosphate.

IT 50441-56-0P 50441-57-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 50441-56-0 CAPLUS

CN [1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-3,3,8-trimethyl-6-(phenylazo)-, benzoate (ester) (9CI) (CA INDEX NAME)

RN 50441-57-1 CAPLUS

CN [1,3]Dioxepino[5,6-c]pyridin-9-ol, 6-amino-1,5-dihydro-3,3,8-trimethyl-, benzoate (ester) (9CI) (CA INDEX NAME)

L5 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1969:96571 CAPLUS

DOCUMENT NUMBER: 70:96571

ORIGINAL REFERENCE NO.: 70:18033a,18036a

TITLE: Pyridoxine chemistry. XX. Selective esterifications

and acyl rearrangements in vitamin B6

AUTHOR(S): Paul, Burton; Korytnyk, Wsewolod

CORPORATE SOURCE: Roswell Park Mem. Inst., Buffalo, NY, USA

SOURCE: Tetrahedron (1969), 25(5), 1071-87 CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 70:96571

AB Acyl migration and selective esterification were investigated in pyridoxal and pyridoxamine. Esterification of pyridoxal under various conditions gave esters with the hemiacetal structure. In pyridoxal, acyl migration could not be detected, possibly because of inability to form the ortho acid intermediate, hence permitting selective esterification of the phenolic hydroxyl. In pyridoxamine, $0 \rightarrow N$ acyl migration takes place very readily from both the 3-0 and α 5-0 positions, but the reverse migration could not be observed. 3-0, α 4-N- and α 4-N, α 5-0-diesters of pyridoxamine were prepared. Thus it is now possible to obtain selectively esterified derivs. of pyridoxal and pyridoxamine by taking advantage of either the absence or the presence of acyl migration. 5-Thiol esters of pyridoxol were obtained, but no acyl migration in the direction 5-S \rightarrow 4-0 could be detected. Factors that determine acyl migration are discussed.

IT 14210-78-7P

RN 14210-78-7 CAPLUS

CN [1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-3,3,8-trimethyl-, 4-nitrobenzoate (ester) (9CI) (CA INDEX NAME)

L5 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1968:402828 CAPLUS

DOCUMENT NUMBER: 69:2828 ORIGINAL REFERENCE NO.: 69:543a

TITLE: Pyridoxine chemistry. XVII. Adamantoyl esters of

pyridoxol

AUTHOR(S): Korytnyk, W.; Fricke, G.

CORPORATE SOURCE: Roswell Park Mem. Inst., Buffalo, NY, USA

SOURCE: Journal of Medicinal Chemistry (1968), 11(1), 180-1

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal LANGUAGE: English

AB Pyridoxal adamantoates having potential usefulness in probing for hydrophobic regions within the receptor sites at which pyridoxol analogs bind, are prepared in order to investigate the chemical and biol. usefulness of the adamantoyl group in vitamin B6 chemistry and pharmacology. The reaction of $\alpha 4$, 3-0-isopropylidenepyridoxol (I) with adamantoyl chloride in pyridine gives $\alpha 4$, 3-0-isopropylidene- $\alpha 5$ -0- adamantoylpyridoxol (II), which when refluxed in HCl-MeOH yields $\alpha 5$ -0-adamantoylpyridoxol-HCl (III). \$\$Graphic Adamantoylation of $\alpha 4$, $\alpha 5$ -0-isopropylidenepyridoxol in pyridine with adamantoyl chloride gives $\alpha 4$, $\alpha 5$ -0-isopropylidene- $\alpha 3$ -0- adamantoylpyridoxal (IV), which rearranges in methanolic HCl to $\alpha 4$ -0-adamantoylpyridoxol-HCl (V). Preliminary evaluation indicates that III and V are comparatively weak growth inhibitors.

IT 18615-90-2P 18615-91-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 18615-90-2 CAPLUS

CN 1-Adamantanecarboxylic acid, 3,3,8-trimethyl[1,3]dioxepino[5,6-c]pyridin-9-yl ester, hydrochloride (8CI) (CA INDEX NAME)

● HCl

RN 18615-91-3 CAPLUS

CN 1-Adamantanecarboxylic acid, 3,3,8-trimethyl[1,3]dioxepino[5,6-c]pyridin-9-yl ester (8CI) (CA INDEX NAME)

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ANSWER 13 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
1.5
ACCESSION NUMBER:
                           1968:69294 CAPLUS
DOCUMENT NUMBER:
                           68:69294
ORIGINAL REFERENCE NO.: 68:13411a,13414a
TITLE:
                           Syntheses of nicotinic acid derivatives of amino
                           acids, nucleosides, and vitamin B6 groups
AUTHOR(S):
                           Uno, Hitoshi; Funabiki, Hiroko; Irie, Akira;
                           Yoshimura, Yoshio
CORPORATE SOURCE:
                           Dainippon Pharm. Co., Osaka, Japan
                           Yakugaku Zasshi (1967), 87(11), 1293-7
SOURCE:
                           CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE:
                           Journal
LANGUAGE:
                           Japanese
     Amino acids, nucleosides, and vitamin B6 were treated with nicotinoyl
     chloride and the corresponding N-nicotinoyl derivs. were prepared Thus, 1
     mole amino acid ester is dissolved in pyridine, stirred for 3 hrs. with 1
     mole nicotinoyl chloride. HCl (Ia) to give the following N-nicotinoyl amino
     acids [structure, m.p., [\alpha]D (c and solvent), and % yield given; Nic
     = nicotinoyl group]: DL-iso-PrCH(NHNic)CO2H (DL-I), 214-16°, -, 61;
     L-I, 222-4°, 15.7° (1.00, 50% EtOH), 33;
     L-iso-PrCH2CH(NHNic)CO2H, 185-7°, -6.2° (1.00, 50% EtOH),
     20; NicNH(CH2)2CO2H, 157-9°, -, 12; L-PhCH2CH(NHNic)CO2H,
     178-80°, -34.9° (1.00, 50% EtOH), 40; DL-
     MeS(CH2)2CH(NHNic)CO2H (DL-II), 216-18°, -, 56; L-II,
     198-200°, -21.5° (1.00, 50% EtOH), 39; L-
     NicNH(CH2)3CH(NHNic)CO2H, 225-7°, -7.5° (1.00, 50% EtOH), 17; L-NicNH(CH2)4CH(NHNic)CO2H, 195-7°, -27.6° (1.05, H2O),
     46; L-HO2CCH2CH(NHNic)CO2H, 185-7°, 15.04° [1.13, H2O], 36;
     L-HO2C(CH2)2CH(Nic)CO2Et, 163-5°, -22.5° (1.00, 50% EtOH),
     2. Also prepared are the following nicotinoyl esters of nucleosides (name
     of the compound, m.p., and % yield given): 5'-O-nicotinoyladenosine,
     135-40° (picrate m. 200-5°), 32; N6-2',3',5'-0-
     tetranicotinoyladenosine, 105-10°, 78; 2',3',5'-tri-O-nicotinoylguanosine, 160-80°, 43; 2',3',5'-tri-O-nicotinoylinosine,
     178-81°, 78; 2',3',5'-tri-O-nicotinoylxanthosine, 175-80°,
     40; trinicotinoyluridine, 177-8°, 48. Derivs. of vitamin B6 were
     also prepared Thus, 8.24 g. pyridoxine-HCl and 23.3 g. Ia are dissolved in
     60 ml. CHCl3, 140 ml. pyridine is dropped in under icecooling, the whole
     stirred at room temperature for 3 hrs. to give 7.6 g. 3, \alpha 4, \alpha 5-tri-O-
     nicotinoylpyridoxine, m. 115-16.5°. Similarly prepared are:
     3,\alpha5-O-\alpha4-N-trinicotinoylpyridoxamine (m. 174°),
     3,\alpha4-O-isopropylidene-\alpha5-O-nicotinoylpyridoxine (m.
     98-101°), \alpha 4, \alpha 5-O-isopropylidene-3-O-
     nicotinoylpyridoxine (m. 107-8.5^{\circ}), \alpha 5-0-nicotinoylpyridoxine
     (m. 174-5^{\circ}), \alpha 4, \alpha 5-di-O-nicotinoylpyridoxine (m.
     112-13°), 6-methyl-7-nicotinoyloxy-1,3-dihydrofuro[3,4-c]pyridine
     (m. 163-5°), and 6-methyl-1,7-dinicotinoyloxy-1,3-dihydrofuro[3,4-
     c]pyridine (m. 118-19°).
     15922-83-5P
ΤТ
     RL: SPN (Synthetic preparation); PREP (Preparation)
         (preparation of)
RN
     15922-83-5 CAPLUS
     Nicotinic acid, 1,5-dihydro-3,3,8-trimethyl[1,3]dioxepino[5,6-c]pyridin-9-
CN
     yl ester (8CI) (CA INDEX NAME)
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L5 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1968:28937 CAPLUS

DOCUMENT NUMBER: 68:28937

ORIGINAL REFERENCE NO.: 68:5575a,5578a

TITLE: Acyl migration and selective esterification in

pyridoxol

AUTHOR(S): Korytnyk, Wsewolod; Paul, Burton

CORPORATE SOURCE: Roswell Park Mem. Inst., Buffalo, NY, USA

SOURCE: Journal of Organic Chemistry (1967), 32(12), 3791-6

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 68:28937

AB Acyl groups on the phenolic OH of pyridoxol migrated to the alc. OH in the 4-position. This rearrangement occurs with aromatic (benzoyl, p-nitrobenzoyl) and aliphatic (Ac, palmitoyl) esters. The mechanism of this rearrangement was studied. A rearrangement of this type takes place during partial esterification of pyridoxol with acid chlorides and explains the formation of aliphatic 3,4-diesters in high yields. 22 references.

RN 14210-76-5 CAPLUS

CN [1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-3,3,8-trimethyl-, benzoate (ester) (8CI, 9CI) (CA INDEX NAME)

RN 14210-77-6 CAPLUS

CN [1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-3,3,8-trimethyl-, benzoate (ester), hydrochloride (8CI) (CA INDEX NAME)

● HCl

RN 14210-78-7 CAPLUS

CN [1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-3,3,8-trimethyl-, 4-nitrobenzoate (ester) (9CI) (CA INDEX NAME)

RN 14213-49-1 CAPLUS

CN [1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-3,3,8-trimethyl-, acetate (ester) (8CI, 9CI) (CA INDEX NAME)

RN 14213-50-4 CAPLUS

CN [1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-3,3,8-trimethyl-, acetate (ester), monopicrate (8CI) (CA INDEX NAME)

CM 1

CRN 14213-49-1 CMF C13 H17 N O4

CM 2

CRN 88-89-1 CMF C6 H3 N3 O7

RN 14320-31-1 CAPLUS

CN Palmitic acid, 1,5-dihydro-3,3,8-trimethyl-[1,3]dioxepino[5,6-c]pyridin-9-yl ester (8CI) (CA INDEX NAME)

L5 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1967:482112 CAPLUS

DOCUMENT NUMBER: 67:82112

ORIGINAL REFERENCE NO.: 67:15479a,15482a

TITLE: Pyridoxinyl nicotinates

PATENT ASSIGNEE(S): Dainippon Pharmaceutical Co., Ltd.

SOURCE: Neth. Appl., 18 pp.

CODEN: NAXXAN

DOCUMENT TYPE: Patent LANGUAGE: Dutch FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	NL 6608293		19661216	NL 1966-8293	19660615
	DE 1670526			DE	
	FR 5875			FR	
	GB 1149086			GB	
	JP 43014707		19680000	JP	
	JP 44032412		19690000	JP	
	US 3557131		19710119	US	19660606
PRIC	RITY APPLN. INFO.:			JP	19650615
				JP	19651217
_					

OTHER SOURCE(S): MARPAT 67:82112

AB The title compds., characterized by delayed activity of their components and hence having less side effects than nicotinic acid, are prepared The compds. also have hypocholesterolemic, anti-atherosclerotic, and hypoglycemic activity. Thus, a suspension of 2 g. pyridoxine-HCl and 5.3 g. nicotinoyl chloride-HCl in 50 ml. pyridine is agitated for 3 hrs., after which the mixture is filtered, the filtrate concentrated in vacuo, the residue dissolved in CHCl3, the CHCl3 solution washed, dried, and concentrated

The

residue is dissolved in EtOH, the solution saturated with dry HCl, diluted with Et2O, and the precipitate filtered, dissolved, and repptd. to give 1 g. 3,4,5-tri-O-nicotinoylpyridoxine, m. 173-5°. Similarly prepared are 3,5-di-O-nicotinoylpyridoxal, m. 118-19°; 3,5-di-O-nicotinoyl-4-N-nicotinoylpyridoxamine, m. 174°; 4,5-O-isopropylidene-3-O-nicotinoylpyridoxine, m. 107-8.5° (aqueous EtOH); 3,4-O-isopropylidene-5-O-nicotinoylpyridoxine, m. 98-101° (aqueous EtOH); 5-O-nicotinoylpyridoxine, m. 174° (EtOH).

IT 15922-83-5P

RN 15922-83-5 CAPLUS

CN Nicotinic acid, 1,5-dihydro-3,3,8-trimethyl[1,3]dioxepino[5,6-c]pyridin-9-yl ester (8CI) (CA INDEX NAME)

ANSWER 16 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN L5 ACCESSION NUMBER: 1965:424058 CAPLUS DOCUMENT NUMBER: 63:24058 ORIGINAL REFERENCE NO.: 63:4263b-f TITLE: Pyridine derivatives INVENTOR(S): Kimel, Walter; Leimgruber, Willy PATENT ASSIGNEE(S): F. Hoffmann-La Roche & Co., A.-G. SOURCE: 7 pp. DOCUMENT TYPE: Patent Unavailable LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: KIND DATE APPLICATION NO. PATENT NO. 19650104 FR 1963-954619 FR 1384099 19631122 BE 640507 BE GB 1013893 GB GB 1013894 GB NL 301100 NLUS 1962-241019 US 3250778 19660510 19621129 PRIORITY APPLN. INFO.: US 19621129 For diagram(s), see printed CA Issue. AB The known I, where R = alkyl, are prepared by acid hydrolysis from II in which R1 = H or acyl, R2 = H, alkyl, alkenyl, or aryl, R3 = H, alkyl, alkenyl, or aryl, or R2 and R3 = polymethylene. I and II form acid addition salts with inorg. or organic acids. II are obtained by condensation of 4,7-dihydro-1,3-dioxepins (III) with oxazoles (IV) where R4 is alkoxy or cyano at $80-250^{\circ}$. The intermediates V give II where R1 = H, or in the presence of alkylating agents, R1 = alkoxy. The reaction of III with IV is catalyzed by acids and autocatalyzed by II. The intermediate II need not be isolated. II, V, and some III are new. Thus, a mixture of 300 g. cis-2-butene-1,4-diol, 31. acetone, 200 g. Na2SO4, and 13 ml. concentrated H2SO4 kept 20 hrs. gives III (R2 = R3 = Me), b755 144.5-47°, n24.5D1.4465. III (R2 = R3 = H) (2.4 g.), 2.1 g. IV <math>(R = Me, R4 = CN) and CC13CO2H in a sealed tube at 150° for 20 hrs. gives II (R = Me, R1 = R2 = R3 = H) (VI), m. 175-6°; hydrochloride m. 208-8.5°. VI with Ac20 then ethanolic HCl gives hydrochloride of II (R = Me, R1 =Ac, R2 = R3 = H) (VII), m. $194-5^{\circ}$; free base m. $86.5-7.5^{\circ}$. VII refluxed with 12N methanolic HCl 16 hrs. gives I (R = Me) hydrochloride, m. 207-8° (decomposition). VI (50 mg.) with 5 ml. AcOH, 1 ml. H2O, and 0.1 ml. 72% HClO4 refluxed 3 hrs., evaporated, and crystallized from ethanolic HCl gives I (R = Me) hydrochloride, m. 208-9° (decomposition). Also prepared were II (R = Me, R1 = R2 = H, R3 = iso-Pr), m. $164-4.5^{\circ}$ [(HCl salt m. $190-1^{\circ}$ (decomposition); acetate-HCl (VIIa) m. $173-3.5^{\circ}$], II (R = Me, R1 = R2 = H, R3 = Ph) (VIIb), m. $160-60.5^{\circ}$, II [R = Me, R1 = H, (R2R3 =) (CH2)5] (VIII), m. 167-9° (in vacuo). IV (R = Me, R4 = MeO) b. 140-2°. VIII (100mg.) and 10 ml. N/HCl heated on a steam bath 15 min. gave pyridoxol-HCl, m. 202-3° (decomposition), also prepared from VIIa, VIIb, and VII, and from 4-methyloxoazole-5-carbonitrile (IX) and 4,7-dihydro-2-isopropyl (or phenyl)-1,3-dioxepin. IX (3 ml.) and 25.2 g. 4,7-dihydro-2-propenyl-1,3-dioxepin (X) heated 17 hrs. at 180° in a sealed tube to give II (R = Me, R1 = R3 = H, R2 = propenyl), which treated with alc. HCl gave pyridoxol-HCl, similarly prepared from IX and the 2,2-dimethyl analog of X. TΤ 1622-66-8P, [1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-8-methyl-, acetate 1966-88-7P, [1,3]Dioxepino[5,6c]pyridin-9-ol, 1,5-dihydro-3-isopropyl-8-methyl-, acetate, hydrochloride

2319-67-7P, [1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-8-methyl-, acetate, hydrochloride

● HCl

● HCl

ANSWER 17 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN T.5

ACCESSION NUMBER: 1963:33247 CAPLUS

58:33247 DOCUMENT NUMBER:

ORIGINAL REFERENCE NO.: 58:5622h,5623a-c

Seven-membered cyclic ketal of pyridoxol TITLE:

AUTHOR(S): Korytnyk, W.

CORPORATE SOURCE: Roswell Park Mem. Inst., Buffalo, NY

SOURCE: Journal of Organic Chemistry (1962), 27, 3724-6

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

CASREACT 58:33247 OTHER SOURCE(S): For diagram(s), see printed CA Issue.

Pyridoxol-HCl (I) (12 g.) suspended in 300 ml. Me2CO treated in the cold with dry HCl 25 min. (13 g. HCl taken up), the mixture shaken 1 hr., kept overnight at -10 to -20° , and filtered, the mixture (10 g.) suspended in K2CO3 solution and kept several hrs. at 5° , and the product crystallized gave 5.4 g. $\alpha 4$, $\alpha 5$ -O-isopropylidenepyridoxol (II), m. 184-5° (aqueous MeOH). I (12 g.) suspended in 250 ml. Me2CO treated in 5 min. with 11 g. dry HCl gave 74% crude II. II (0.245 g.) in N HCl heated 40 min. at 85-90° gave 0.225 g. I, m. 210-12° (decomposition). II (2.415 g.) in 50 ml. C5H5N treated 2 hrs. at 0° with 2.5 ml. BzCl gave 3.23 g. 3- O-benzoyl- $\alpha4,\alpha5$ isopropylidenepyridoxol, m. $107-9^{\circ}$ (aqueous alc.). II (1.05 g.) in 50 ml. C5H5N treated 16 hrs. at room temperature with 2.23 g. p-MeC6H4SO2Cl gave 1.45 q. 3-0-p-toluenesulfonyl- α 4, α 5-0-isopropylidenepyridoxol (III), m. 145-6°. 3-O-Methanesulfonyl- $\alpha 4$, $\alpha 5$ -Oisopropylidenepyridoxol, similarly obtained, m. 72-3°. III (0.9

g.) heated 0.5 hr. with 100 ml. 10% HCO2H containing 20 ml. alc. gave 0.63 g. 3-O-p-toluenesulfonylpyridoxol, m. 186-7° (CHCl3-alc.). II wasstable to alkali. In contrast to the 6-membered ketal II could be readily

monotosylated and monomesylated as shown above. Comparison of the ultraviolet spectra of II, pyridoxol, and $\alpha 4-3-0-$

isopropylidenepyridoxol confirmed the structure of II.

ΙT 14210-76-5P, [1,3]Dioxepino[5,6-c]pyridin-9-ol,

1,5-dihydro-3,3,8-trimethyl-, benzoate

RL: PREP (Preparation)

(preparation of)

RN 14210-76-5 CAPLUS

[1,3]Dioxepino[5,6-c]pyridin-9-ol, 1,5-dihydro-3,3,8-trimethyl-, benzoate CN (ester) (8CI, 9CI) (CA INDEX NAME)

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The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> log yCOST IN U.S. DOLLARS SINCE FILE TOTAL SESSION ENTRY FULL ESTIMATED COST 1.32 276.58 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL NTRY SESSION -13.6 ENTRY CA SUBSCRIBER PRICE -13.60

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